

## **Development of entrepreneurship education based on the *menara berkah* model in Indonesian vocational high schools**

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### **ABSTRACT**

Soft skills-based learning is very important to equip vocational high school students, one of which is entrepreneurship. This research aims to develop entrepreneurship learning through the *menara berkah* model. This research aims to develop entrepreneurship learning through the *menara berkah* model. This research is a type of development research including pre-development stage of the model, model development, and validation or model testing stage. The research sample amounted to 25 people from two vocational high schools in Palembang and Yogyakarta. While data collection techniques using mixed methods and data analysis using statistical tests. Based on the construct of the model content assessment results obtained an average of 4.45, this score indicates that all aspects are components that are feasible to be used as material or content of entrepreneurship-based learning management models in the catering expertise competency. The *menara berkah* model is proven to be effective and applicable, with an average achievement of 4.76%, this indicates that this model can be used and can make it easier, especially in entrepreneurship-based learning. The results also show six competencies that must be possessed by students, namely: technical skills, decision making, organizational skills, marketing and financial management, risk taking, creativity, and innovation.

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### **1. INTRODUCTION**

Competence school graduates in various countries with the world of work always become problem complicated [1]. This is not regardless of quality graduates who don't have everything have the abilities, skills, and skills required by the company or institution [2]. Not only in developed countries, in developing countries like Indonesia, Malaysia, Thailand, and several other Asian countries, problem graduates problems together [3]. Graduates of school, if observed so, will relate to the learning model implemented at school. School becomes a place for adding knowledge and honing required skills following fieldwork [4]. Not all schools are capable of providing a learning model following needs. So that automatic, the resulting graduates needed to have adequate and appropriate skills hope from the company. There are global problems this also happened in Indonesia. Although there is no doubt that Indonesia is a country rich in natural resources. However, this is not in harmony with the welfare of the Indonesian people. The increasing number of unemployed results in higher crime and poverty and a decline in health [5]. The government has conducted various programs to reduce unemployment, although these efforts have not been entirely satisfactory [6]. As a developing country, it is undoubtedly a challenging thing to improve people's lives. This requires strong measures, including empowering human resources so that this can be a solution to reducing poverty [7].

The open unemployment rate is an indicator used to measure the level of supply of labor that is not used or not absorbed by the labor market. Based on the data above, unemployment rate is shown by the same pattern in February 2021, August 2020 and February 2020 [8]. As of February 2021, unemployment rate graduates from vocational high schools are still the most prominent compared to alums of other training levels, which is 11.45 %. Meanwhile, those with elementary school education and below was the lowest unemployment rate, namely 3.13 %. In contrast to February 2020, unemployment rate in almost all teaching classifications experienced an increase apart from Diploma I/II/III alums which fell by 0.08 focus levels. However, compared to August 2020, each classification of schools has decreased according to the decrease in general unemployment rate. The most significant decline in unemployment rate occurred in vocational high school graduates, namely 2.10 foci. The unemployment rate for vocational high schools is still the highest among other levels of education. The high unemployment rate of the vocational high school graduates, according to Slamet because vocational schools currently only carry out a single function, namely preparing their students to work in certain fields as employees [5]. As a result, it impacts the weak in preparing students to become entrepreneurs [9]. Another thing that needs to be improved in vocational schools is their slow response to the dynamics of economic development demands [10]. Apart from that, there is not yet optimal alignment with the world of work and there is no guarantee that students will get a decent job.

In line with the above, Soputan revealed that the challenge of vocational education is to respond to the changes faced by today's society to prepare skilled workers according to needs so that the competencies of vocational high school graduates need to be updated and improved; this can be achieved through entrepreneurship education and job training. Students' entrepreneurial attitude can be seen from the aspects of self-confidence, task and result-oriented, risk-taking, leadership, originality, and future-oriented [11]. Facing this condition, the government [12] through launched the revitalization of vocational high school in which vocational high school are expected to be able to change the mindset of graduates who are not only graduates who are ready to work but become graduates who are ready for entrepreneurship and independence. This program is a form of government concern for the still high level of unemployment among the educated. Vocational high school students have enormous opportunities in entrepreneurship, but so far, these opportunities have been missed because readiness to become entrepreneurs has yet to be developed. After graduating from school, vocational high school students in tourism expertise, especially in the culinary department, are very wide open to becoming entrepreneurs. Still, this opportunity has yet to be caught by students because readiness to become entrepreneurs has yet to be developed. Opportunities for entrepreneurship in this field are vast, for example, skills in the culinary field. These skills are efficient. Therefore, vocational high school majoring in culinary need to be aware of this; they should be able to make graduates with the skills they have to create jobs. However, on the other hand, in planning and implementing the competence learning for culinary skills, entrepreneurs have yet to involve them maximally. Industrial work practices or apprenticeships are only a requirement of the vocational high school program; there is no contribution related to fostering entrepreneurial values from the *dunia usaha dunia industri* (the world of business and the world of industry), so they have yet to be able to ignite the entrepreneurial spirit of students. Not to mention from the point of view of selecting educators who incidentally need help understanding how to run a business. This is closely related to the role of the school principal as the manager of the vocational school to organize the role of educators following their competency skills.

Besides that, the problems above are also inseparable from school management, one of which is related to the learning process. The main problem in learning is how teachers can manage quality and quality learning, this is important to be the commitment of teachers because even if the curriculum has been changed for the better and complete educational facilities will not have a significant impact on improving the quality of education if it is not supported by good teacher performance, which can create a quality learning process. Learning will be quality if the teacher can manage his learning activities. Based on the description above, cultivating entrepreneurial competencies in fostering readiness to become entrepreneurs for vocational high school students is essential in producing graduates who can create jobs (entrepreneurship). Therefore, it is necessary to study, formulate, and implement integration patterns in learning management models with various strategies. Entrepreneurship-based learning management uses entrepreneurial principles or concepts to improve education quality and create entrepreneurs. Creating entrepreneurs here is not to take advantage of education administrators but for the benefit of the teaching and learning process, by implementing entrepreneurship-based learning management in the culinary skills competency, students will have the mindset of being job creators and not job seekers, which will add to the problem of intellectual unemployment due to limited job opportunities. Study this aims to produce management models learning based entrepreneurship that can be implemented in vocational high school on competency catering expertise to increase independence, innovation, and creativity. Participant education on skill development.

The results of the research in the first stage or preliminary research, which includes the initial survey, focus group discussion (FGD), filling out questionnaires, and interviews, then they can provide answers regarding the problems in application management integrated learning entrepreneurship as well as

what is just needed in the development of the *menara berkah* model. Besides that, the aspects proposed to be the contents of the model are the systematic elements of the model, the substance aspects of the model, the linguistic aspects and the visual aspects. In addition to these aspects, attention must be paid to the model according to needs, things that are important and also useful, easy to use, facilitate schools, and can be applied in implementing an entrepreneurship-based learning management model in the competence of catering expertise. Drip various problems appear in learning at the vocational high school, then appear question study that is how to model management cooperative learning developed at the time this is based entrepreneurship?

## 2. LITERATURE REVIEW

A theoretical study is significant for describing the theme research conducted. The subchapter will explain the *menara berkah* learning model and also an explanation about the urgency of learning models in schools. This model departs from a conceptual framework regarding learning management which is integrated with entrepreneurship material. Several components in learning such as teachers, students, and teaching techniques are the most important parts of designing the *menara berkah* model.

### 2.1. Model entrepreneurship-based learning management (*menara berkah*)

Model is an extension of the entrepreneurship-based learning management model, which is focused on inputs, processes, and outputs. On inputs is element management i.e., head schools, teachers, students, the world of business and the world of industry, materials, methods of learning, facilities, financing, as well as society; on the process is cycle management learning carried out at the Top-level manager and first line manager. While on the output model, students capable of competence entrepreneurship from best frame. Here's a management model for learning-based entrepreneurship or the *menara berkah* model. Aspect is implementing learning management by integrating two managerial levels, namely, i) the top manager is the principal position and ii) first line manager is the teacher. Learning management is not only the teacher's job; the management function starting from decision-making, learning planning, organizing learning, actualizing learning, monitoring, and evaluating learning, is also the main task of school principals, where so far, the majority of school principals only carry out their functions as administrators and administrator's supervisors. The management cycle should be carried out by two levels, both at the top management level and from the first-line manager [13]. Work programs that run effectively and efficiently and follow the needs of schools and society will have a separate impact on the quality of learning and students. Principals with top manager positions should create a positive climate and build the motivation of educators to continue to improve performance in managing knowledge, which is no less important monitoring carried out at the top management level must run simultaneously and continue with a series of learning management at the first line level where g er. Through the concept of the entrepreneurship-based learning management model *menara berkah* expected, the principal has a very urgent role in determining the direction and entrepreneurial progress of the vocational high school he leads. Principal as a top manager, fully responsible in terms of managing learning through decision making, strengthening vision and mission, which has an impact on the learning implementation framework, a clear concept of apprenticeship, involvement of business actors, division of tasks with regard to vocational specialization teachers (C) who are called teachers productive, as well as monitoring and evaluation is also carried out by the school principal on the implementation of learning by teachers both in terms of administration and processes that occur in the classroom and in the field.

On the other hand, teacher, as first line manager, will be responsible full in learning process activities [14]. The teacher designs or plans, the teacher organizes the class, the teacher supervises, and controls the course to create an "interesting" (fun, creative, innovative, and productive) learning atmosphere, right on target and achieving the expected goals and targets [10]. Furthermore, on aspects of entrepreneurial competence mastered by students, namely, brain, behavior, skill, spiritual, financial literacy, and mental health, in this case, is abbreviated as best frame. The mastery of the best frame competency in the *menara berkah* model has two important components that are; i) material aspects of entrepreneurship and ii) entrepreneurial values. The first aspect is an entrepreneurial material framework with various materials, which in this case, the author calls the term "demeditation" or definition, production management, marketing management, manifestation, monitoring, and evaluation. Demeditation is a component of entrepreneurship material that forms the basis for implementing integrated learning on the competence of culinary expertise. It is not only an object of discussion; the transfer of knowledge will be balanced when it is balanced with the transfer of values from an object and the learning process. These values include the second aspect, namely entrepreneurial values called kind person, namely, creative, innovative, dedicated, productive, leader, and professional. Kind person becomes a core value that becomes the axis of students' entrepreneurial abilities. Students are equipped with the knowledge and skills to develop independence and pocket the core values of entrepreneurship. The concept of learning management, the

concept of entrepreneurial competence, and the design of the entrepreneurship-based learning management model (*menara berkah*) are the results of the elaboration of research data developed in the field through data collection mechanisms, interview results, observation, FGD, and review of data verification both carried out by the researchers themselves, practitioners and experts. Furthermore, the data collected by the researchers was analyzed using quantitative and qualitative analysis. The results of a series of methodological mechanisms then resulted in the design of the entrepreneurship-based learning management model (*menara berkah*) in the competence of catering expertise.

## 2.2. Urgency management learning

According to Minister of National Education Republic of Indonesia Number 41 of 2007, Learning is a process of interaction between students and teachers and learning resources in a learning environment [15]. The learning process needs to be planned, implemented, assessed, and supervised to be carried out effectively and efficiently [16]. Education concentrates on developing practical competencies [17]. This concentration impacts all activities carried out in the vocational education process, so the learning activities are oriented toward forming functional competencies used for work [18]. Activities in vocational education should not only focus on building work competence but also support forming one's identity [19]. The identity development in question is an emphasis on competence that is in line with the needs of the world of work so that it can form individuals who are brave, independent, responsible, responsible, and disciplined in contributing to the world of work [20]. In the learning system in vocational high school, students are allowed to express their creative ideas as a form of student-centered learning that emphasizes learning that directly provides experiences for students [21]. Learning through experiential vocational education, Higgins [22] suggests that proper provision of vocational education can be achieved only when students are engaged in a learning process that has relevance to them. Apart from emphasizing the democratic essence of education, includes supporting the learner's ability to make moral and rational choices based on acting independently as a unique person [23].

A broad spectrum of constructivist learning also supports this view. This places the learner at the center of the educational process and as more than a subject or object, but as an active agent. Individuals are active meaning makers, not simply unquestioned recipients of stimuli from elsewhere, as behaviorists have argued. To support learning to provide meaningful responsive relationships, philosopher thinker Hopkins proposes that the curriculum is based on activities and reciprocal relationships [24]. Such an idea provides a view of the curriculum not only as a device of learning components but as part of the interaction between students and the world as suggested to them and how they experience it. Students' worldview needs to be framed with a framework of views that gives a contextually touching impression. Unfortunately, learning is often meaningless when two-way interactions do not occur but only focus on the teacher who finds it difficult to find and tries to take two sides of the interaction. Such a learning experience has become a critical basis that the manifestation of the potential of their ideas can be maximized [25].

The European Commission 2018, provides details of eight main competencies of learning, which means that lifelong learning provides context as a path to student success [26]. These competencies include literacy; language; mathematics, science, technology, and engineering; digital competence; personal, social, and learning competency; citizenship competence; entrepreneurial competence; and cultural awareness and expression. The various competencies above will be complex for students to achieve if the learning context does not focus on developing student abilities [27]. Because these eight competencies place great emphasis on learning, which provides free and plenary space for students to develop interests and skills and be able to interact with all potential entities together to help add knowledge to both cognitive, affective, and psychomotor aspects of students. The concepts in Figure 1 illustrate an individual's learning cycle which includes the stages of observing, assessing, designing and implementing.

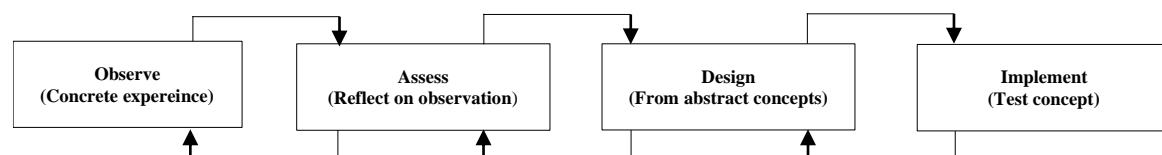


Figure 1. The observeassess design implement (OADI's) individual learning cycle

Essentially and fundamentally, learning can also be considered a process of progress; in this case, it means that every individual who gets the opportunity to learn means also has the chance to glance at all their potential and insights connected with new knowledge that is explored [28] from the experience of understanding something and thanks to the support of the interaction process with others [29].

### 3. RESEARCH METHOD

This dissertation research aims to produce an entrepreneurship-based learning management model that can be applied in vocational high schools on culinary skills competency in enhancing students' entrepreneurial competence. Based on the formulation of the problem and research objectives described previously, the type of research used in this study is research development. The research, planning, production, and testing development model [30].

#### 3.1. Participant

The participation taken from this study totaled 25 people from two of vocational high schools training in Palembang and Yogyakarta. The sample taken shared becomes a sample for the instrument trial totaling five people and samples counting 20 people. The participants of this study were determined through the representation of the two schools with the selection of samples that describe the characteristics of each school.

#### 3.2. Research procedures and instruments

The procedure for developing an entrepreneurial learning management model (*menara berkah*) use research and development method and is carried out in three stages, namely, pre-model development or preliminary study, the second stage of model development [31], the third stage, namely the validation or model testing stage. While the data collection technique uses a mixture of quantitative and qualitative methods. The research procedure can be seen through the visual flow in Figure 2.

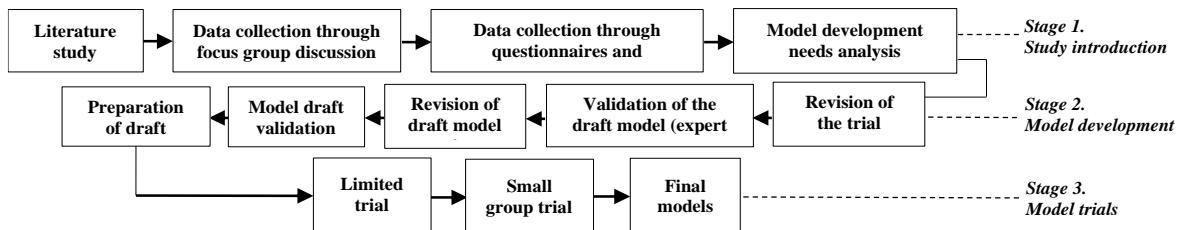


Figure 2. Procedure development study

The preliminary study stage is through literature studies obtained from books, research journals, and articles relevant to this research's title. The field studies were carried out through surveys by filling out questionnaires, observations, and interviews to obtain initial information, FGDs with stakeholders to discuss the current condition of entrepreneurship-based learning management and the need for the development of an entrepreneurship-based learning management model (*menara berkah*). The second stage is the development stage, including formulating the model draft and validating the model draft by practitioners and experts. Validation of the entrepreneurship-based learning management model consists of one education management professor, one learning management lecturer, one vocational lecturer, one economics professor, one psychologist professor, one Indonesian language lecturer, one culinary lecturer, two entrepreneurs, one head of a home organization eat Palembang, one vocational high school education policyholder, three culinary teachers four entrepreneurship teachers, and two vocational high school heads in Palembang. Data validation using data collection instruments consists of four aspects: systematic, substance, linguistic, and graphical. Data analysis technique from counting score between 1 to 5. The more achievements score tall; the models stated Good or in accordance with the need for development models. The score was examined individually and as a whole. Average overall achievement score, then the percentage for knowing the model according to the needs or not yet. Besides the score, data obtained inputs in form description. Inputs This will perfect the model to become a model in accordance with need.

Stage third is stage trials limited and small. Trials are done to get information applicability models. The model said they could apply with good if the score shows a number greater than or equal to three or gets a statement in response that can apply from the Teacher or party school as an institution that has tried implementing. subject trials limited involve the head of the vocational high school and the teachers of the vocational high school with an amount subject of five people. And small trials involved 14 teachers and six principals' school from state vocational high school and private in Palembang and Yogyakarta. The trial uses an instrument with a total of 31 items. The instrument test try covers two parts. Part first for measuring the contents of the model consists of four aspects: the five-item systematic aspect, seven items of substance

aspect, five items of language aspect, and the graphical aspect six items. Whereas part two for measuring applicability consists of eight items of model's component.

### 3.3. Data analysis techniques

Data analysis technique with calculate data obtained in test try limited form score between one until with five. The higher the score, the model is declared good or follows the need for the development entrepreneurship-based learning management model (*menara berkah*). Conversely, if the score is low, the model is inappropriate for the market. Besides the score, data obtained input-input in form description. Inputs This will perfect the model to become one of the following needs.

## 4. RESULTS AND DISCUSSION

### 4.1. Formulation model draft

The model draft is a model developed from factual model models and theoretical models. Which has been validated by expert validators, practitioners, and stakeholders. This hypothetical model is improved by considering the suggestions and input from the validator so that it will produce a model learning management-based entrepreneurship for increased competence in student catering vocational training worth. The design of the entrepreneurship-based learning management model can be seen in Table 1.

Table 1. Blueprint management learning-based entrepreneurship

	Taking decision	Planning	Organizing	Implementation	Monitoring and evaluation
Top manager (head school)	Identification of problems, needs, and goals	Formulate goals and strategies, plans work school, and plans work annual	Structure organization, chief schools, teachers, and <i>dunia usaha dunia industri</i> (the world of business and the world of industry)	Communication with <i>dunia usaha dunia industri</i> (the world of business and the world of industry) and complied needs means infrastructure	Monitoring the teacher's learning process
Choose an alternative making decision	Coordination with <i>dunia usaha dunia industri</i> (the world of business and the world of industry) and planning the Entrepreneurship program	Delegating duties and responsibilities answer			Evaluate results and plans follow to carry on
First manager (teacher)	Assessment needs student	inflamed structure business organization class	Arrange organizational structures, school principals, teachers, and <i>dunia usaha dunia industri</i> (the world of business and the world of industry)	Activity monitoring learning student	
	Develop semester programs, annual programs, and device learning	Coordination with <i>dunia usaha dunia industri</i> (the world of business and the world of industry) parties and elements public		Evaluation realm cognitive, affective, psychomotor (revision kind person self, project mini-companies, demeditation)	Students' competence in entrepreneurship

Management learning on the *menara berkah* model is carried out by the school principal for the educational institution level and at the class level, which the teacher carries out. There is a whole integration of material and entrepreneurial values in a series of learning management cycles. The monitoring and evaluation aspect is not only limited to the form of a project or final assignment but also provides an emphasis on the values of independence, intuition, and integrity between hard skills and soft skills together. There is coaching for students who have an interest and entrepreneurial talent. Management learning prioritizes project-based learning oriented towards students' abilities to become entrepreneurs, involving *dunia usaha dunia industri* (the world of business and the world of industry) in lesson planning, materials prioritizing local food, and teacher competence must be improved. The *menara berkah* model applies a learning model that leads to the results of student projects that prioritize the locality of the province of Sumatra. Therefore, the learning tools used during the trial have been adapted to Palembang's specialties; for example, in the expertise competency in serving fish and seafood, the selected cooking material is fish management but still integrated with entrepreneurial values and material.

#### 4.2. Validity

Experts in each specialty of the field carry out model validation by practitioners. Analysis technique using statistics. The validation results for each aspect are listed in Table 2. The results of the validation of the model draft carried out by prospective users (practitioners) total score one no one voted for (0%), score two no one voted for (0%) score 3 no one voted for (0.5%), score 4 reached 25% and a score of 5 reached 74%. The overall average score is 4.725 out of the highest score of 5. Based on this score, scores 4 and 5 get more than 90%, so it can be concluded that the draft model can be used without improvement. However, there is a small note regarding the error in writing the word, which is revised/improved accordingly. The assessment diagram, as shown in Figure 3, shows that all aspects reach a score above 4; this means that the model is good so the draft model can be continued at the next stage 3, namely validation from the expert team.

Table 2. Description of practitioner responses to the draft model validation activity

No.	Aspect	Average score	(%)	Deviation standard	Information
1	Model systematics	4.6	92	0.49	Valid
2	Model substance	4.9	97.43	0.33	Valid
3	Model discussion	4.5	89.60	0.57	Valid
4	Model graphics	4.9	97.33	0.34	Valid
	Amount	18.9	376		
	Average	4.725	94		

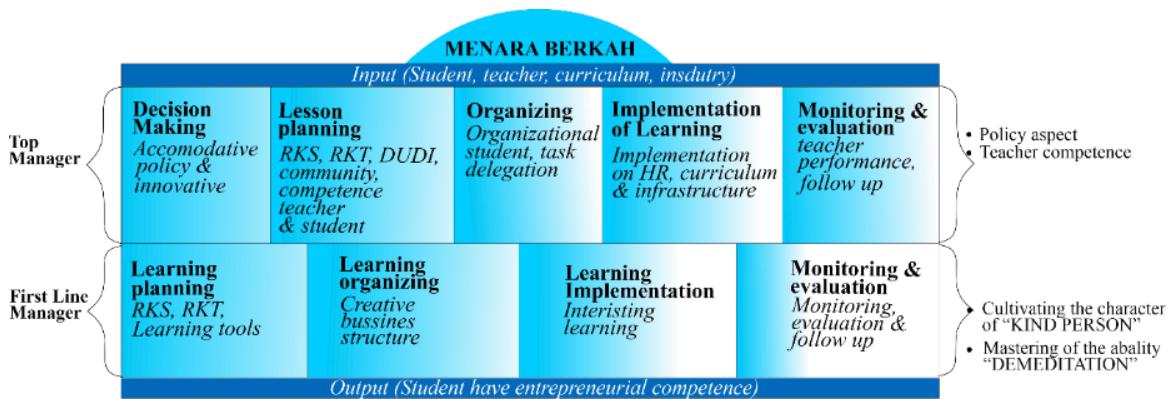


Figure 3. The *menara berkah* hypothetical model

#### 4.3. Validation by the expert team

A team of experts from education management, learning management, psychology, entrepreneurship, languages, vocational, and economics gives corrections, input, and suggestions to existing instruments made [32]. Expert validation results can see in Table 3. The results of filling out a questionnaire conducted by a team of experts resulted in a score of 1, no one voted (0%), a score of 2, no one voted (0%), a score of 3 reached (0%), a score of 4 reached 58%, and a score of 5 reached 48%. The average overall score reached 4.29 out of a score of 5. Based on the achievement of these scores, scores 4 and 5 reached more than 87%, so it can be concluded that the draft model can be used. Figure 4 shows that the model assessment carried out by a team of experts achieves scores between 4 to 5. If you look at Figures 4 and 5, the scores for all aspects, namely aspects of systematics, substance, language, and graphics, a score above 4.29, which means that the draft model is perfect; after the draft model is revised, it can be tested.

Table 3. Expert validation results

No.	Aspect	Average score	(%)	Deviation standard	Information
1	Model systematics	4.18	84	0.66	Valid
2	Model substance	4.47	89.43	0.5	Valid
3	Model discussion	4.2	89.60	0.52	Valid
4	Model graphics	4.31	86.33	0.56	Valid
	Amount	17.16	349		
	Average	4.29	87		

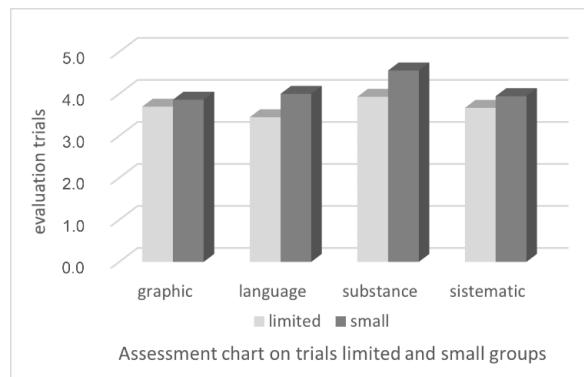


Figure 4. Assessment chart on trials limited and small groups

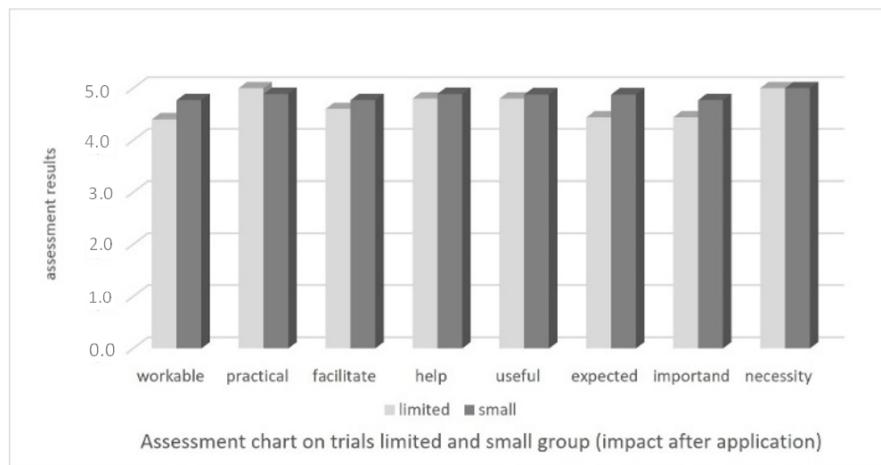


Figure 5. Assessment chart on trials limited and small group (impact after application)

#### 4.4. Revision model draft and model test

Model revision already made in draft form or design must also be repaired for every component. Done later modification of the draft model, a hypothetical model can be depicted in Figure 3. Limited trials were conducted by five respondents from state vocational schools in Palembang. The trial process begins with applying the model and ends with filling out a questionnaire that contains six aspects and consists of 23 items. Trial results can be seen in Table 4.

Table 4. Potential user response to limited trial of model content assessment

No.	Aspect	Score average (%)	Standard deviation	Ket
1	Model systematics	4.24	85	0.66
2	Model substance	4.43	88.57	0.5
3	Model discussion	4.08	81.60	0.49
4	Model graphics	4.26	85.33	0.63
	Amount	17.01	340	Valid
	Average	4.2525	85	

The score results in the trial were limited to providing an assessment of the contents of the model, obtaining a score of 0% or no one voted for, a score of 2 (0%) or no one voted for, score 3 achieved a score of 4.5%, but a score of 4 achieved 61.3% and a score of 5 reached 34.2%. The achievement of this score indicates that the model is appropriate and can be used. While the results of the average score per aspect are as follows: the systematic element of the model achieves an average score of 4.24, the substance aspect of the model achieves an average score of 4.43, the linguistic part achieves an average score of 4.08, the graphic feel reaches the average score is 4.26, from all aspects of the limited group trial to assess the content of the model is 4.25 or 85% of the highest score 5. From these aspects, it illustrates that the systematic elements of

the model, the substance of the model, the language of the model, and the graphics of the model achieve a very high score. This means that all aspects are appropriate components to be used as material or content for an entrepreneurship-based learning management model in the competence of culinary skills. Below will be shown the test results to assess the model's applicability. The applicability of this model is intended to measure how effectively capital can be applied in schools. To find out the relevance of the model, will be measured using 8 statement items which prospective user respondents then fill in. The results of the limited trial achievement scores to assess the model's applicability are listed in Table 5.

**Table 5. Response of prospective users in limited trials to application of the model**

No.	Aspect	Score average (%)	Standard deviation	Ket
1	Schools need models	5	100	0.0
2	An essential model for schools	4.4	88	0.54
3	The expected model of the school	4.4	88	0.55
4	The model is helpful for schools	4.8	98	0.45
5	Models help schools	4.8	96	0.45
6	Models make school easier	4.6	92	0.54
7	The practical model is applied	5	100	0
8	The focus of learning management is integrated with entrepreneurial values	4.4	88	0.55
	Amount	37.4	750	
	Average	4.675	94	

From the Table 5 it can be seen the results of the scores in the limited trial to assess applicability, score 1, no one chose, or 0%, score two also did not vote, or 0%, score three did not vote, or 0%, score 4 reached 33 %, and a score of 5 reaches 68%, the results of this percentage mean that the draft model facilitates schools in entrepreneurship-based learning management in culinary skills competencies and is very much needed. While the overall average score of 8 items is 4.67 from the highest score of 5, which is 94%. These results indicate that the entrepreneurship-based learning management model in the culinary skills competence can be applied in the outstanding category, and this model, in general, can help, simplify, and be applied well.

#### 4.5. Small group trial

The small group trial involved ten principals and teachers from two vocational high school in Palembang, South Sumatra. It should be tried starting with applying the model and ending with filling out a questionnaire which contains four aspects which consist of 23 items that aim to assess the contents of the model and eight things to assess the applicability of the model. The results of the scores achieved during the small group trials to provide an assessment of the contents of the model are listed in Table 6.

**Table 6. Response of prospective users in the trial small group**

No.	Aspect	Score average (%)	Standard deviation	Ket
1	Model systematics	4.44	89	0.51
2	Model substance	4.88	98	0.32
3	Model discussion	4.48	90	0.58
4	Model graphics	4.83	97	0.37
	Amount	18.63	373	
	Average	4.65	93	

Viewed from the overall percentage, in the one percentage questionnaire, no one voted on score 1 (0%), score two no one voted for or 0%, score three no one voted for or 0% while score 4 reached 30% and a score 5 reaches 70%. While the results of the average score of aspects of the effects of questionnaire 1 are as follows; systematic model aspect 4.44 (89%), capital substance aspect 4.88 (98%), linguistic aspect 4.48 (90%), graphical aspect 4.83 (97%) The average of all elements is 4.65 (93%) this achievement shows an outstanding category. While the results of the small group trial achievement scores to assess the model's applicability are listed in Table 7.

The results of the score in the small group trial to provide an assessment of the applicability of the model, score one no one chose or 0%, score two no one chose or 0%, score three did not choose or 0%, score 4 reached 13% and a score of 5 gets 88%. While the average score of questionnaires 2 to assess the model's applicability is 4.85, this achievement shows a percentage of 98% in the outstanding category. The results of

this score indicate that the entrepreneurship-based learning management model in the competence of catering skills is perfect. From the results, trials can depict results evaluation trials small and limited to Figure 4.

Table 7. Response of prospective users in the trial small group for give evaluation model applicability

No.	Aspect	Score average	(%)	Standard deviation	Ket
1	Schools need models	5	100	0.0	Valid
2	An essential model for Schools	4.77	96	0.44	Valid
3	The expected model of the school	4.88	98	0.33	Valid
4	The model is helpful for schools	4.88	98	0.33	Valid
5	Models help schools	4.89	98	0.33	Valid
6	Models make school easier	4.77	96	0.44	Valid
7	The practical model is applied	4.89	98	0.33	Valid
8	The focus of learning management is integrated with entrepreneurial values	4.77	96	0.44	Valid
		Amount	38.85	780	
		Average	4.85625	98	

The explanation in the Figure 4 is that there are measurement results that show the results obtained in each aspect, namely systematics, substance, linguistics, and graphics. Examining Figure 4 regarding the diagram of the assessment results in limited trials and small groups seen from the model content, which includes systematic, substance, linguistic, and graphical aspects which are displayed simultaneously, it shows that the assessment results are in the range of a score of 4 (good) and a score of 5 (perfect).

Looking at Figure 5 about the diagram of the results of the assessment in limited trials and small groups seen the impact after implementing the model, which includes that the model is needed, important, expected, useful, help, facilitate, practical, and can be applied also shows that the assessment results are in the score range 4 (good) and a score of 5 (perfect). These results show that the entrepreneurship-based learning management model (*menara berkah*) in culinary skills competence can be applied properly from all aspects. The entrepreneurship-based learning management model (*menara berkah*) in culinary skills competence is also a school requirement whose existence is highly expected.

#### 4.6. The *menara berkah* model

The *menara berkah* is theoretically feasible based on expert and user validation and empirically possible through 2 stages of field trials. Component development is carried out methodologically through research and development. this method, is carried out through conceptual, theoretical, and empirical studies in the field through surveys, assessments, and FGD. So, the management model found learning based entrepreneurship (*menara berkah*) which is ideal for application in vocational high school in Palembang and Yogyakarta. *menara berkah* is an extension of the entrepreneurship-based learning management model whose core management process is carried out at the top manager and first line manager levels. The management cycle includes decision-making, planning, implementation, organizing and monitoring, and evaluation [33]. Through the concept of the entrepreneurship-based learning management model (*menara berkah*), school principals have a very urgent role in determining the entrepreneurial direction and progress of the vocational schools they lead. The principal is fully responsible for managing learning through decision-making, strengthening the vision and mission, which has an impact on the learning implementation framework, a clear concept of apprenticeship, involvement of business actors, division of tasks concerning vocational specialization teachers (C) who are called productive teachers, and monitoring and evaluation are also carried out by the school principal on the implementation of learning by teachers both in terms of administration and the processes that occur in the classroom and the field.

On the other hand, the teacher is called the first line manager [34]. In this case, the teacher directly leads the learning process activities. Teachers who design or plan, teachers who organize classes, and teachers who supervise and control classes [35], to create an interesting learning atmosphere (fun, creative, innovative, and productive), are right on target and achieve the goals and targets set expected. This model has characteristics including; i) the commitment of the principal in improving entrepreneurial competence in students majoring in culinary science; ii) the involvement of business partners or *dunia usaha dunia industri* (the world of business and the world of industry) is carried out intensively from planning to learning evaluation; iii) teacher and student competencies that are integrated with entrepreneurial values; iv) internships and street vendors encourage students to have experience in entrepreneurship; v) Material competence for catering expertise based on the needs of the community; vi) the methods used vary, but more emphasis is placed on the method of repetition and practice; vii) the assessment is carried out thoroughly both cognitively, affectively and psychometrically; and viii) the community is involved in learning planning.

Culinary competency competencies integrated with entrepreneurial values offer students the ability to think creatively, become effective problem solvers, analyze business ideas objectively, and communicate, network, lead, and evaluate any given project [36]. Students feel more confident about setting up their own business if they can test their ideas in a supportive environment. However, the benefits of integrated catering expertise competencies with entrepreneurial values are wider than boosting start-ups, innovative ventures and new jobs. Entrepreneurship is a competency for everyone, helping young people be more creative and confident in their work. Six basic points to be controlled for increased competence in entrepreneurship students, namely, brain, behavior, skill, spiritual, financial literacy, and mental health, in this case, is abbreviated as best frame. This is supported by Slamet's theory which argues that entrepreneurial character includes essential human qualities, which have the quality of the intellect, the quality of the heart, and the quality of physical strength. Furthermore, six essential points should become the teachers' task in developing competence entrepreneurship. In this case, the author refers to the term "demeditation" or definition, production management, marketing management, manifestation, monitoring and evaluation [37]. From demeditation, the material on entrepreneurship on culinary skills competencies is not only an object of discussion; the transfer of knowledge will be balanced when it is balanced with the transfer of values from an object and the learning process.

Findings This exact match with research by Leyden and Link [38], who wrote down the stages and steps in entrepreneurship can at least be carried out through the following seven steps; decide to become an entrepreneur, identify and evaluate business opportunities. Develop business plans, mobilize resources, organize companies, manage companies, manage growth [39]. Meanwhile, the core values are the axis of students' entrepreneurship skills in study. This is called becoming a "kind person," namely, creative, innovative, dedicated, productive, leader, and professional. Kind person students are equipped with knowledge and skills in developing independence and pocket the core values of entrepreneurship. Likewise, disclosed by Bygrave and Zacharakis [40], there are ten entrepreneurial characteristics known as 10D, namely dreams, decisiveness, doers, determination, dedication, devotion, details, fate, dollars, and distribution.

## 5. CONCLUSION

From the results, the study can conclude that model management learning-based entrepreneurship generates a model end, which is given name *menara berkah* with a test try limited and small. Judging from the content of the model, which includes aspects of systematics, substance, language, and graphics, as well as the impact after applying the model, which provides for that the model is needed, necessary, expected, useful, helps simplify, practical and applicable, shows that the results of the assessment are in the range of score 4 (good) and score 5 (very good). These results provide an understanding that the entrepreneurship-based learning management model (*menara berkah*) in the culinary skills competence can be appropriately applied and facilitates formerly in managing learning-based entrepreneurship. This research tries to explore more new management models in education that can be put into practice. The development of the results of this research shows that the *menara berkah* model can be applied to entrepreneurship learning in vocational high school. The *menara berkah* model has form emphasized learning ability cognitive, affective, and psychomotor. It means competent students will be directed in a manner special for achieving expected competence. The obstacles in implementing this model focus on the teacher's ability to integrate entrepreneurial values in learning skills competencies. so that socialization is needed regarding the *menara berkah* model.

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## REFERENCES

- [1] N. M. Aleksandrova and P. V. Guseva, "The study of teachers' activity in vocational education as a scientific problem," *International Review of Management and Marketing*, vol. 6, no. 3, pp. 1–8, 2016.
- [2] M. Bogo, F. Mishna, and C. Regehr, "Competency frameworks: bridging education and practice," *Canadian Social Work Review*, vol. 28, no. 2, pp. 275–279, 2011.
- [3] S. Narayanan and B. Selvanathan, "Challenges of women empowerment in a private organization in Malaysia," *International Journal for Studies on Children, Women, Elderly and Disabled*, vol. 1, pp. 90–95, 2017.

- [4] M. Samani, S. Sunwinarti, B. A. W. Putra, R. Rahmadian, and J. N. Rohman, "Learning strategy to develop critical thinking, creativity, and problem-solving skills for vocational school students," *Jurnal Pendidikan Teknologi dan Kejuruan*, vol. 25, no. 1, pp. 36–42, Apr. 2019, doi: 10.21831/jptk.v25i1.22574.
- [5] S. Huikari and M. Korhonen, "Unemployment, global economic crises and suicides: evidence from 21 OECD countries," *Applied Economics*, vol. 53, no. 13, pp. 1540–1550, Mar. 2021, doi: 10.1080/00036846.2020.1838430.
- [6] J. Eatwell, "Unemployment: national policies in a global economy," *International Journal of Manpower*, vol. 21, no. 5, pp. 343–373, Aug. 2000, doi: 10.1108/01437720010377675.
- [7] L. C. Maldonado and R. Nieuwenhuis, "Family policies and single parent poverty in 18 OECD countries, 1978–2008," *Community, Work & Family*, vol. 18, no. 4, pp. 395–415, Oct. 2015, doi: 10.1080/13668803.2015.1080661.
- [8] E. A. R. Puspadijita, "Factors that influence the rate of unemployment in Indonesia," *International Journal of Economics and Finance*, vol. 10, no. 1, pp. 140–147, Dec. 2017, doi: 10.5539/ijef.v10n1p140.
- [9] T. Abebe and J. Waters, *Laboring and learning*. Singapore: Springer Singapore, 2017. doi: 10.1007/978-981-287-032-2.
- [10] Y. Zhuravlova, N. Kichuk, N. Zhuravskaya, O. Yakovenko, V. Zhytnyk, and S. Yashchuk, "The problem field of professional (vocational) education: innovations and ways to improve," *Estudios de Economía Aplicada*, vol. 39, no. 5, pp. 1–10, May 2021, doi: 10.25115/eea.v39i5.5274.
- [11] G. J. Soputan, "Are vocational high school students ready to be entrepreneur?," *Innovation of Vocational Technology Education*, vol. 13, no. 2, Sep. 2017, doi: 10.17509/invotec.v13i2.8264.
- [12] P. R. I. Presiden Republik Indonesia, *Presidential instruction on the revitalization of Vocational High Schools in order to improve the quality and competitiveness of Indonesia's human resources (in Indonesian)*. 2016.
- [13] S. Carliner, "Using business models to describe technical communication groups," *Technical Communication*, vol. 59, no. 2, pp. 124–147, 2012.
- [14] Patris Rahabav, "The effectiveness of academic supervision for teachers," *Journal of Education and Practice*, vol. 7, no. 9, pp. 47–55, 2016.
- [15] Minister of National Education Republic of Indonesia, "Regulation of the Minister of National Education of the Republic of Indonesia Number 41 of 2007 (in Indonesia)," Jakarta, Jakarta Pusat, Indonesia: Presiden Republik Indonesia (2007).
- [16] Lumaurridlo, H. Retnawati, H. C. A. Kistoro, and H. Putranta, "School readiness assessment: Study of early childhood educator experience," *Elementary Education Online*, vol. 20, no. 1, pp. 468–478, 2021, doi: 10.17051/ilkonline.2021.01.041.
- [17] H. Bowers, "Curriculum design in vocational education," *Australian Association for Research in Education Annual Conference*, pp. 1–25, 2006.
- [18] M. Faizah, I. Rahayu, A. Ruhana, and L. Rakhamwati, "Islamic wedding attraction in entrepreneur vocational perspective," in *Proceedings of the International Conference on Indonesian Technical Vocational Education and Association (APTEKINDO 2018)*, Paris, France: Atlantis Press, 2018, pp. 293–296. doi: 10.2991/aptekindo-18.2018.64.
- [19] S. Billelt, *Vocational education: Purposes, traditions and prospects*. New York: Springer Science & Business Media, 2011.
- [20] J. Guenther, "Vocational learning in the frame of a developing identity," *Vocational Learning*, pp. 205–216, 2011, doi: 10.1007/978-94-007-1539-4\_13.
- [21] H. C. A. Kistoro, S. Ru'iyah, D. Husna, and N. M. Burhan, "Dynamics of the implementation of experience-based religious learning in Indonesian and Malaysian senior high schools," *Jurnal Pendidikan Agama Islam*, vol. 19, no. 2, pp. 283–296, Dec. 2022, doi: 10.14421/jpai.2022.192-08.
- [22] C. Higgins, "Dewey's conception of vocation: existential, aesthetic, and educational implications for teachers," *Journal of Curriculum Studies*, vol. 37, no. 4, pp. 441–464, Jul. 2005, doi: 10.1080/00220270500048502.
- [23] D. Kennedy, "Anarchism, schooling, and democratic sensibility," *Studies in Philosophy and Education*, vol. 36, no. 5, pp. 551–568, Sep. 2017, doi: 10.1007/s11217-016-9534-3.
- [24] D. Hopkins, *Creating the conditions for classroom improvement: a handbook of staff development activities*. London: Routledge, 2013.
- [25] Y. Chen, T. A. Daamen, E. W. T. M. Heurkens, and W. J. Verheul, "Interdisciplinary and experiential learning in urban development management education," *International Journal of Technology and Design Education*, vol. 30, no. 5, pp. 919–936, Nov. 2020, doi: 10.1007/s10798-019-09541-5.
- [26] P. Ludlow, *The European commission. in the new European community*. London: Roudledge, 2018.
- [27] V. Sahuichenko, S. Vyacheslav, I. Bezena, P. Olha, and M. Olha, "State policy on the formation of students' civic and social competences in conditions of educational reform," *Education and Training Magazine*, vol. 5, no. 3, p. e3080, Jun. 2020, doi: 10.25053/redufor.v5i15set/dez.3080.
- [28] R. Siswanto, S. Sugiono, and L. D. Prasojo, "The development of management model program of smart productivity teacher partnership with business world and industrial world (DUDI)," *Jurnal Ilmiah Peuradeun*, vol. 6, no. 3, pp. 365–384, Sep. 2018, doi: 10.26811/peuradeun.v6i3.322.
- [29] Y. Ishitani, "Development of organizational capability from entrepreneurial identity: case study of Hirohisa Yamamoto and Yamamoto precious metal co., ltd," in *PICMET 2018 - Portland International Conference on Management of Engineering and Technology: Managing Technological Entrepreneurship: The Engine for Economic Growth, Proceedings*, IEEE, Aug. 2018, pp. 1–9, doi: 10.23919/PICMET.2018.8481843.
- [30] A. Campbell, O. McNamara, and P. Gilroy, *Practitioner research and professional development in education*. London: SAGE Publications Ltd, 2004. doi: 10.4135/9780857024510.
- [31] Sivasailam Thiagarajan, D. Sammel, and M. Semmel, *Instructional development for training teachers of exceptional children: a sourcebook*. Minnesota: eric, 1974.
- [32] S. Mi, J. Ye, L. Yan, and H. Bi, "Development and validation of a conceptual survey instrument to evaluate senior high school students' understanding of electrostatics," *Physical Review Physics Education Research*, vol. 19, no. 1, pp. 1–33, Feb. 2023, doi: 10.1103/PhysRevPhysEducRes.19.010114.
- [33] M. A. S. Malisi, "System of educational quality assurance in high school," in *Proceedings of the 3rd International Conference on Research of Educational Administration and Management (ICREAM 2019)*, Paris, France: Atlantis Press, 2020. doi: 10.2991/assehr.k.200130.170.
- [34] D. Muijs and A. Harris, "Teacher leadership in (in)action: three case studies of contrasting schools," *Educational Management Administration and Leadership*, vol. 35, no. 1, pp. 111–134, Jan. 2007, doi: 10.1177/1741143207071387.
- [35] M. Aliakbari and R. Darabi, "On the relationship between efficacy of classroom management, transformational leadership style, and teachers' personality," *Procedia - Social and Behavioral Sciences*, vol. 93, pp. 1716–1721, Oct. 2013, doi: 10.1016/j.sbspro.2013.10.105.

- [36] F. I. P. Pratama, A. Kristiyanto, and H. Widystono, "Analysis of self-confident character on slow learner students in learning at the inclusive elementary school in Surakarta," in *ACM International Conference Proceeding Series*, New York, NY, USA: ACM, Sep. 2020, pp. 1–5. doi: 10.1145/3452144.3452185.
- [37] S. Slamet, "Development of SMK model for the future," *Jurnal Cakrawala Pendidikan*, no. 1, pp. 14-26, 2013, doi: 10.21831/cp.v5i1.1256.
- [38] D. P. Leyden and A. N. Link, "Toward a theory of the entrepreneurial process," *Small Bus Econ*, vol. 44, no. 3, pp. 475–484, Mar. 2015, doi: 10.1007/s11187-014-9606-0.
- [39] A. Omrane and A. Fayolle, "Entrepreneurial competencies and entrepreneurial process: a dynamic approach," *IJBG*, vol. 6, no. 2, p. 136, 2011, doi: 10.1504/IJBG.2011.038486.
- [40] W. D. Bygrave and A. Zacharakis, *The portable MBA in entrepreneurship*. New York: John Wiley & Sons, 2015.

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